

BUILDING SAFETY DEPARTMENT
Revised June 6, 2003
**CONVERTING SINGLE FAMILY
DWELLINGS TO BUSINESS OR
MERCANTILE**

Converting a single family residence to a business or mercantile occupancy? Under the North Carolina Building Codes, this constitutes a “change of Occupancy Group” and requires that the building be brought up to current building code standards. This fact sheet is intended to provide you with general information regarding which major issues must be addressed in making such a change. Each item listed includes the code reference where more detailed information may be obtained. The conversion of a single family dwelling to business or mercantile can be complicated. We recommend that you engage a design professional (Architect or Engineer) to assist you with the conversion.

<u>ISSUE</u>	<u>CODE REFERENCE</u>	<u>COMMENTARY</u>
FLOOR LOAD CAPACITY		
- specify load standard for occupancy type and location in building	NCSBC T 1607.1 (North Carolina State Building Code)	Engineer or Architect Required. Business occupancy requires 50 PSF in offices, 80 PSF for upper floor corridors and 100 PSF in lobbies/reception areas.
STAIR PROTECTION		
- rated shaft enclosure	NCSBC Sec. 1005.3.2	Exit stair shafts in buildings with only one exit from second floor require a one hour rated construction with one hour labeled door. An open central stair is not an exit.
- rated approach (hallway/corridor)	NCSBC T 1004.3.2.1	Exit corridors require one hour rated walls with 20 minute labeled doors.
- sprinkler system	NCSBC Sec. 3402.5	A single exit may be recognized as a legitimate exit if the building is fully sprinklered and not over four stories, with 1-hour protected stairway and less than 100 occupants per story.
OCCUPANCY SEPARATION		
- occupancy separation	NCSBC Sec. 302 T 302.3.3	Fire rated wall & floor/ceiling assemblies may be required between occupancy groups.
EXITS/EXIT CAPACITY		
- number of required exits <u>M</u> = Mercantile <u>B</u> = Business	See NCSB Section 1004 and T 1005.21 for # of exits. See T 1005.2.2 for single exits	In <u>B</u> or <u>M</u> occupancy, one exit is allowed if no more than 2 stories high and less than 30 occupants per floor & max travel distance to exit less than 75 ft. (stair from second floor must be 1 hr. protected shaft with 1 hr rated doors).
- exit signs	NCSB Sec. 1003.2.10	Must be installed
- maximum travel distance (assumes 2 exits)	NCSB T-1004.2.4	200 ft. if unsprinklered, 300 ft. if sprinklered, unless there is only one exit.
- dead end limits	NCSB 1004.3.2.3	Max length for dead end corridor is 20 ft.
HANDICAPPED ACCESSIBILITY		
- areas of rescue assistance	NCSB 6.3.2.1.1	If an exit from an occupiable level above or below the level of exit discharge is inaccessible, then Areas of Rescue Assistance shall be provided on each such level.
- primary ingress & egress	I-C, Sec 1.1 (b) & (c)	Must have primary access.

- restrooms	I-C, Sec 1.1 (b)	Must have HC accessible restrooms.
<u>ISSUE</u>	<u>CODE REFERENCE</u>	<u>COMMENTARY</u>
EMERGENCY LIGHTING		
- means of egress must be illuminated at all times the space being served is occupied	NCSB 1003.2.11	Must be installed
MECHANICAL ISSUES		
- protection of rated wall penetrations		Concerns fire caulking and dampers in rated wall penetrations.
- smoke detection in ducts	Section 606 Mechanical Code.	Smoke detection required in ducts for systems >2000. See section 606 Mechanical Code
- boiler room separation		1 hr separation is required if over 15 psi and 10 horsepower
OTHER “MAYBE’S” DEPENDING ON SIZE, SETBACKS, ZONING, ETC.		
- exterior wall fire rating opening protection		Specifies % openings and ratings of walls based on building type and distance from common or assumed property line.
- handrails/guardrails	NCSB 1003.2.12 & 1003.3.11	Handrails 34”-38” high, 4” diameter sphere cannot pass through openings.
- zoning issues	Asheville Zoning Ordinance	Contact Zoning at 259-5850.
- mixed occupancy (residential and business or mercantile)		Specifies fire rating of walls and floor/ceiling assemblies separating occupancy groups in same building.
- insulation requirements		